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AUTHOR	Wabnick, Richard; And Others
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ABSTRACT

This report presents an analysis of the debt levels and debt burdens of recent college graduates, based on student-reported data from four national surveys taken over the period 1977 to 1986. The major findings of this study were the following: (1) one out of two 1986 college graduates had some undergraduate debt representing an increase from one out of three 1977 graduates; (2) the median debt level of baccalaureates with debt rose from $2,000 for 1977 graduates to $4,800 for 1986 graduates; (3) the median debt burden--the ratio of repayments to gross income--of 1986 graduates was 4.0% in the year following their graduation from college, down slightly from 5.2% for 1977 graduates; (4) only 6.5% of all 1986 graduates had a debt burden in their first year after graduation that exceeded 10% of gross income, down .2% from 1977 graduates; and (5) only 4.8% of 1986 graduates had debt but no first-year income at the time of the survey, up .1% from 1977 graduates. Appendices include an explanation of the debt burden assumptions used in the computations, various statistical breakdowns of education debt and debt burden for 1986 bachelor's degree recipients, and descriptions of federal education loan programs and debt burden. (GLR)

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DEBT BURDEN FACING COLLEGE GRADUATES

Prepared Under Contract for the U.S. Department of Education by:

Decision Resources Corporation
Washington, DC

Westat, Inc.
Rockville, MD

Contract No. LC89082001

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CONTENTS

	Page
Executive Summary	vii
Introduction	1
Defining Debt Burden	3
Debt and Debt Burden Findings	5
Conclusions	13
Appendix A. Debt Burden Assumptions	A-1
Appendix B. Education Debt and Debt Burden for 1986 Bachelor's Degree Recipients	B-1
Appendix C. Federal Education Loan Programs and Debt Burden	C-1

LIST OF TABLES

Table 1	Percentage with debt and median debt, in current and constant dollars, for bachelor's degree recipients: 1977, 1980, 1984, 1986	7
Table 2	Debt burden of bachelor's degree recipients in their first year after graduation, with debt and employed: 1977, 1980, 1984, 1986	7
Table 3	Estimated debt burden for bachelor's degree recipients in their first year after graduation, by control of institution: 1986	8
Table 4	Estimated debt burden of teachers and other professionals among bachelor's degree recipients in their first year after graduation: 1986	8
Table 5	Percentage distribution of bachelor's degree recipients by level of debt burden in their first year after graduation and by control of institution: 1986	10

LIST OF APPENDIX TABLES

		Page
B.1	Debt burden of 1986 college graduates, by gender	B-1
B.2	Debt burden of 1986 college graduates, by marital status	B-2
B.3	Debt burden of 1986 college graduates, by major field	B-3
B.4	Debt burden of 1986 college graduates, by first occupation	B-4
B.5	Debt burden of 1986 college graduates, by starting salary	B-5

EXECUTIVE SUMMARY

This report presents an analysis of the debt levels and debt burdens of recent college graduates, based on student-reported data from four national surveys taken over the period 1977 to 1986. Debt level is the total amount of education loans owed at the time of graduation. Debt burden is the ratio of debt repayment to gross income during the first year after graduation.

The major empirical findings of this study are:

- One out of two 1986 college graduates had some undergraduate debt. This is an increase from one out of three 1977 graduates.
- The median debt level of baccalaureates with debt rose from $2,000 for 1977 graduates to $4,800 for 1986 graduates -- a 140 percent increase in current dollars. This represents a 33 percent increase in dollars adjusted for inflation. (A median debt of $2,000 means that half of the 1977 graduates with debt had debt below that figure, and half had debt above that figure.)
- The median debt burden -- the ratio of repayments to gross income -- of 1986 graduates was 4.0 percent in the year following their graduation from college, down slightly from 5.2 percent for 1977 graduates. That is, it is estimated that half of 1986 graduates with debt and incomes had debt payments below 4 percent of their gross incomes in the year following graduation.
- Only 6.5 percent of all 1986 graduates had a debt burden in their first year after graduation that exceeded 10 percent of gross income--a threshold, based on mortgage lending practices, beyond which nonhousing debt burden may be considered onerous. By comparison, 6.7 percent of all 1977 graduates had a debt burden in excess of 10 percent.
- Only 4.8 percent of 1986 graduates had debt but no first-year income at the time of the survey. For 1977 graduates, the comparable figure is 4.7 percent.

The statistics in this report are estimates based on sample surveys and are subject to both sampling and nonsampling errors (e.g., nonresponse and item misinterpretation). In addition, these data have four other important limitations:

- They represent only 4-year college graduates. Graduates from less-than-4-year schools, as well as postsecondary school dropouts, who may have more problems with repayment, are not included in these data.
- The most recent survey was of 1986 graduates, who graduated from college prior to implementation of the 1986 Amendments to the Higher Education Act. This legislation, among other things, raised loan limits. Thus, those graduating after 1986 are likely to have a higher average debt level, though not necessarily a higher debt burden.
- These data do not provide actual repayment terms of a student's debt. Therefore, assumptions were made about debt composition and terms.
- The estimated debt burdens are, as previously stated, for the first year after graduation. Because incomes tend to grow and debt payments remain fairly constant, debt burdens tend to decline over time. Thus, the numbers tend to represent upper limits on debt burden.

In addition to limitations in the survey data, we restricted our analysis to bachelor's degree recipients who were not seeking an advanced degree during the year after graduation. The incomes of these students are likely to be considerably different from those not pursuing advanced degrees and, if included, would confound interpretation of the data. Most students pursuing graduate studies would not begin repaying their loans until after leaving graduate school. Despite these limitations, the data provide an excellent opportunity to analyze debt burden levels from 1977 to 1986.

INTRODUCTION

Much has been written about the cost of higher education and the debt which many students assume. The media point to the private colleges that charge more than $10,000 per year for tuition and report on the student who leaves college with some extraordinarily high amount of debt. An analysis of the data reveals, however, that the overwhelming majority of college graduates do not bear an onerous *debt burden* (the ratio of debt repayment to income) after they graduate.

This report presents an analysis of the debt levels and debt burdens reported by recent graduates of 4-year colleges in four national surveys taken over the period 1977 to 1986. Following this introduction, the next section defines debt burden and establishes a benchmark used in this analysis to measure high debt burdens. The third section presents survey findings on debt levels and debt burdens. Finally, some conclusions are drawn regarding the extent to which excessive debt may exist.

Debt burden is a useful financial indicator because the dollar amount of debt alone does not indicate the level of hardship placed on those in repayment. Debt burden calculations are appropriate because they indicate the relationship between debt and the income used to repay that debt. Just as a mortgage lender would not decide to award a mortgage based solely on the loan amount, policymakers should be concerned with a borrower's *ability to repay* his education debt as well as the level of that debt. Very high debt burdens for certain students may suggest the need for remedial actions to provide financial relief. However, if debt burdens are generally low, then education loan policies may be working properly to facilitate college financing.

Five limitations of the analyses presented in this report should be kept in mind. First, the survey data refer only to graduates from 4-year colleges and universities. As a result, they exclude community college and proprietary school students and those who have dropped out of any postsecondary school. While no comprehensive study of debt levels and burden has yet been conducted for less-than-baccalaureate students, we would expect to find significant differences between them and their 4-year counterparts because: (1) they are likely to have considerably lower cumulative debts since they generally attend lower cost schools or enroll in programs for shorter periods of time; (2) they are more likely to be unemployed after they graduate; and (3) if

employed, their post-graduation earnings are likely to be lower than those of 4-year college graduates.

Second, we restricted the analyses to graduates who were not pursuing an advanced degree during the first year after college. It is inappropriate to look at debt burden for those students during their first year after completing their baccalaureate, since most of them would not begin repaying their loans until after leaving graduate school.

Third, the most recent debt data available for this study apply to 1986 graduates. These data were collected prior to passage of the 1986 Amendments to the Higher Education Act, which raised loan limits in the federally subsidized student loan programs. We would expect future survey data to indicate an increase in average borrowing as more students borrowed amounts closer to the new loan ceilings.[1] We would also expect more borrowers to stretch out their repayment periods since lenders permit longer maturities for larger loans.

Fourth, the survey data do not tell us the composition or the terms of a student's debt. The data do not reveal the extent of each student's borrowing under available loan programs nor the interest rate or repayment period which each loan carries. Therefore, we must posit some assumptions about debt composition and terms in order to estimate student loan burdens. These assumptions are discussed in Appendix A. It should be noted, however, that even though exact debt burdens would vary with slightly different assumptions, the major conclusions of this study would not change.

Fifth, debt burdens are presented for the first year after graduation only. For most working people, incomes rise over time. However, payments on collegiate debt tend to remain stable. Therefore, we would expect debt burdens to decrease over time and the numbers reported herein would represent upper limits on debt burden.

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[1]The next Survey of Recent College Graduates will be conducted in June 1991 to obtain information from 1989-1990 college graduates. Data will be available late in 1991.

DEFINING DEBT BURDEN

Debt burden is a financial concept used to measure the manageability of debt by various entities, such as individuals, families, corporations, or nations. The concept is probably most familiar as it relates to a home mortgage. Mortgage lenders set limits on the percentage of a family's income that can be used for housing payments. Currently, these limits range from 25 to 30 percent of gross income. Lenders compute this debt burden as the ratio of a family's expected monthly mortgage principal, interest, taxes, and insurance to its monthly gross income. This, then, is the family's housing debt burden. Lenders also compute another ratio which approximates a family's total debt burden. This is the ratio of its monthly housing payments plus other monthly credit liabilities (car, credit card, and other loan payments) to monthly income. To qualify for a mortgage, total debt burden must fall below another limit, generally between 35 and 40 percent of gross income. That is, mortgage lenders generally expect a family's nonhousing debts not to exceed 10 percent of its income. Whichever specific type of burden is being examined, the general concept is that debt burden is the ratio, in a given period, of certain debt payments to income.

In this report, we examine the education debt burden of recent college graduates during their first year after graduation. We define education debt burden as the ratio of education debt repayments to gross income. To the extent possible, we will draw on the results from other studies that examine the pattern of debt burden during the entire repayment period in order to understand how an individual's debt burden changes over time. For simplicity, as well as comparability to the mortgage debt model, we use gross income as the denominator of the education debt burden ratio; other studies have used different measures of income.

Unreasonable Debt Burden

At what level does debt burden become onerous? At what point are borrowers likely to be hard pressed to repay their loans? At what point does education debt intrude on consumption decisions? These subjective questions have been treated in a variety of ways by different researchers. It can be argued that college students and their families entered into loan agreements fully aware of the repayment responsibilities and, therefore, their level of debt burden

was their own choice.[2] On the other hand, certain societal practices regularly restrict indebtedness as a function of income. Home mortgages are restricted this way, as are credit card limits and car payments, though less rigidly. For the purposes of this report, we use the home mortgage model for nonhousing debts and define as onerous any repayment that exceeds 10 percent of gross income.

This 10 percent benchmark is roughly consistent with previous conceptual studies of education indebtedness. For example, Daniere concluded that tolerable education indebtedness should not exceed 6.4 percent of a borrower's pre-tax income (7.5 percent of after-tax income).[3] Hartman suggested that up to 15 percent of a college graduate's before-tax income would not be an overly burdensome education loan repayment.[4] Hansen and Rhodes explored these earlier standards and concluded that between 10 and 15 percent of gross income represented a manageable repayment rate. They report that no more than 4 to 5 percent of 1982-83 college seniors in California had unmanageable debt burdens.[5]

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[2]See Sandra Baum and Saul Schwartz, "The Impact of Student Loans on Borrowers: Consumption Patterns and Attitudes Towards Repayment," January 1988, for a comparison between borrowers' perceptions and consumption patterns. They concluded that while some borrowers may perceive burden, their consumption patterns do not reflect a significant difference from those without debt. Thus, borrowers may, through their own choices, be properly restricting loan burdens.

[3]Andre Daniere, "The Benefits and Costs of Alternative Federal Programs of Financial Aid to College Students," *The Economics and Financing of Higher Education in the United States* (Joint Economic Committee, 1969). Daniere selected his benchmark somewhat arbitrarily, assuming that 90 percent of after-tax income went for consumption and one-quarter of the remaining 10 percent for "contingencies," leaving 7.5 percent available for loan repayment.

[4]Robert Hartman, *Credit for College* (McGraw Hill, 1971). Hartman based his percentage on the amount of loan that could be amortized using the difference in earnings between college and high school graduates.

[5]W. Lee Hansen and C. Rhodes, "Student Debt Crises: Are Students Incurring Excessive Debt?" *Economics of Education Review*, v.7, 1988.

DEBT AND DEBT BURDEN FINDINGS

This section presents findings from survey data on the education debt and starting salaries of recent college graduates. These data are used to compute average debt burdens and to determine the proportion of students likely to face exceedingly high debt burdens.

Data from the Surveys of Recent College Graduates (RCG) allow us to observe the debt levels, starting salaries, occupations, and a variety of other characteristics of a representative national sample of bachelor's degree recipients. These surveys, funded by the National Center for Education Statistics, have been conducted five times since 1975. They are administered to college graduates during the spring of the year following the end of an academic year.[6] For this report, we compiled data on the last four surveys covering the graduating classes of 1977, 1980, 1984, and 1986.

The major findings are:

- One-half of 1986 4-year college students graduated with some education debt, up from one-third of 1977 graduates.
- Of those with debt, the median debt for 1986 graduates was $4,800, up from $2,000 for 1977 graduates. This represents a 140 percent increase in median debt. In constant 1986 dollars, the 1977 median debt would have been $3,617. Thus, the increase in median debt, adjusting for inflation, was 33 percent.
- For 1986 graduates, the median education debt burden in the first year after graduation was 4.0 percent of gross income (of those with education debt and income). This is a slight decrease from 1977 graduates, who had a median debt burden of 5.2 percent.
- Only 6.5 percent of 1986 graduates had debt burdens in the first year after graduation greater than 10 percent of gross income. For 1977 graduates, the comparable figure is 6.7 percent.
- Only 4.8 percent of 1986 graduates had debt but no first-year income at the time they were surveyed. For 1977 graduates, the comparable figure is 4.7 percent.

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[6]For example, the survey for 1986 graduates was administered in the spring of 1987. It sampled those graduating between July 1985 and June 1986. More than 80 percent graduated between January and June 1986.

- For 1986 graduates, median debt burden in the first year after graduation varied from only 3.1 percent to 5.7 percent for any of the occupation, gender, major field, and marital status categories analyzed.

Percentage with Debt, Median Debt, and Salary Levels

The portion of 4-year college graduates who leave school with some education debt has risen steadily from about 35 percent in 1977 to about 50 percent in 1986 (see Table 1). Eligibility rules for Federal loans were loosened (and then somewhat retightened), and the increase in college costs outpaced inflation during this period. These factors likely account for much of the increase in the share of students who borrowed.

The median debt level of baccalaureate degree recipients more than doubled during this period, from $2,000 in 1977 to $4,800 in 1986. In constant 1986 dollars, the median debt rose by only 34 percent from $3,617 to $4,800. Interestingly, median debt dropped slightly, in both current and constant dollar terms, from 1984 to 1986. Although the cause of this decline cannot be determined from the data, several factors may have affected median debt. For example, more borrowers may have attended public schools where, because of lower educational costs, they needed smaller loans.

As shown in Table 2, the median first-year income of college graduates who reported themselves as working for pay at the time surveyed rose substantially, from $10,000 for 1977 graduates to $18,600 for 1986 graduates.[7] This increase appears to coincide with the general rate of inflation observed during this time. In real terms (constant 1986 dollars), there was only a slight rise in median first-year income between 1977 and 1986 graduates.

Debt Burden Levels

The median debt burden of baccalaureates with debt and income declined slightly between 1977 and 1986, from 5.2 percent to 4.0 percent (see Table 2). Tables 3 and 4 show 1986 median debt burden by control of institution and occupation.

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[7]These are incomes for those who graduated and are not seeking additional formal training (i.e., another degree).

Table 1. Percentage with debt and median debt, in current and constant dollars, for bachelor's degree recipients: 1977, 1980, 1984, 1986

Year	Percent with debt	Median debt[a/]	
		Current dollars	Constant dollars[b/]
1977	34.0	$2,000	$3,617
1980	34.9	2,500	3,325
1984	44.8	5,000	5,274
1986	50.1	4,800	4,800

Source: Surveys of Recent College Graduates.

a/ Of those with debt.

b/ In 1986 dollars.

Table 2. Debt burden of bachelor's degree recipients in their first year after graduation, with debt and employed: 1977, 1980, 1984, 1986

Year	Median debt	Median first-year income	Percent with first-year income	Median first-year debt burden[a/] (percent)
1977	$2,000	$10,000	88.8	5.2
1980	2,500	13,280	88.3	3.4
1984	5,000	16,700	90.8	4.3
1986	4,800	18,600	90.6	4.0

Source: Surveys of Recent College Graduates, DRC computation.

a/ The median of individual debt burdens, not the ratio of median debt to median first-year income. Individual debt burdens are calculated as the ratio of annual repayment to gross income. Annual repayment is the total of monthly payments required to amortize the debt. Computed only for those with debt and first-year income. See Appendix A for explanation of loan term assumptions.

Table 3. Estimated debt burden for bachelor's degree recipients in their first year after graduation, by control of institution: 1986

Control	Percent with debt	Median debt[a/]	Percent with first-year income	Median first-year income[b/]	Median first-year debt burden[c/] (percent)
Public	45.0	$4,000	91.3	$18,000	3.4
Private	50.7	7,000	90.7	18,900	5.1

Source: 1987 Survey of Recent College Graduates.
Note: See text for explanation of loan term assumptions.
a/ Of those with debt.
b/ Of those with first-year income and debt.
c/ The median of individually computed debt burdens, not the ratio of median debt to median first-year income. Computed only for those with debt and first-year income.

Table 4. Estimated debt burden of teachers and other professionals among bachelor's degree recipients in their first year after graduation: 1986

Job category	Percent with debt	Median debt[a/]	Median first-year income[b/]	Median first-year debt burden[c/] (percent)
Teacher[d/]	50.7	$4,500	$16,800	5.0
Other Professional[e/]	47.1	5,000	18,700	3.6

Source: 1987 Survey of Recent College Graduates.
a/ Of those with debt.
b/ Of those with first-year income and debt.
c/ The median of individually computed debt burdens, not the ratio of median debt to median first-year income. Computed only for those with debt and first-year income.
d/ Includes elementary through postsecondary teachers. The survey does not permit disaggregation by teaching level.
e/ Includes managers, engineers, scientists, writers, and other professionals.

Among 1986 graduates, those from public schools had a lower median debt burden (3.4 percent) than those from private schools (5.1 percent). The difference was attributable mainly to differences in debt levels, not income. Among those employed as professionals, graduates who worked as teachers (at all levels) had a median debt burden of 5.0 percent, while other professionals had a somewhat lower debt burden of 3.6 percent.

In 1986, only 6.5 percent of baccalaureates exceeded a debt burden of 10 percent in their first year after graduation -- a benchmark which may be used to represent excessive debt burden as discussed earlier. (The comparable figure for 1977 was 6.7 percent.) As shown in Table 5, a higher percentage of private college graduates had a debt burden exceeding this level than did public college graduates. In addition, 4.8 percent of the 1986 graduates with debt reported no income at the time they were surveyed. By comparison, 4.7 percent of 1977 graduates with debt reported no income at the time they were surveyed.

We examined debt burden by gender, marital status, major field, first occupation after graduation, and income during the first year after graduation for 1986 college graduates. Tables summarizing this examination are presented in Appendix B. We found very little variation in median debt burden within these variables.

For example, the median debt burden in the first year after graduation varied from only 3.1 percent to 5.7 percent across categories of all of these variables except income. Median debt rose only slightly with increasing income, hence median debt burden tended to be higher for the lower income graduates. Graduates reporting incomes under $10,000 had a median debt burden of 9.3 percent, while those reporting incomes over $30,000 in their first year after graduation had a median debt burden of only 2.3 percent. Interestingly, graduates reporting higher incomes tend to be less likely to have assumed any debt than those reporting lower incomes in their first year after graduation.

Of course, the specific values for debt burden discussed here are based, in part, on the assumptions used for the borrower's payment terms. For example, a borrower with a $5,000 debt making $18,000 per year and repaying at 8.5 percent interest for 10 years would have a debt burden of 4.1 percent. If, in fact, the repayment term was 9 years, the debt burden would increase to 4.4 percent. However, the estimated overall level of burden would not be substantially changed by plausible variations in repayment assumptions.

Table 5. Percentage distribution of bachelor's degree recipients by level of debt burden in their first year after graduation and by control of institution: 1986

Level of first-year debt burden	Control of institution		
	Public (percent)	Private (percent)	All institutions (percent)
No Debt	51.3	46.1	49.9
> 0 ≤ 5%	28.2	23.9	26.6
> 5 ≤ 10%	10.7	16.2	12.2
Over 10%	5.0	9.2	6.5
Not Calculable[a/]	3.9	4.8	4.8

Source: 1987 Survey of Recent College Graduates.

a/ A debt burden ratio cannot be computed for those who have debt but no first-year income at the time surveyed.

Pattern of Debt Burden Through the Repayment Period

The data presented here focus on the debt burdens of recent college graduates in the first year after graduation. Equally important is the pattern of debt burden for an individual borrower throughout the repayment period. Do debt burdens rise or fall during repayment?

To answer this question requires a comparison of the pattern of debt repayments and future year earnings. Wabnick and Goggin (1981)[8] undertook such an analysis using 1978 RCG debt data and earnings profiles for full-time and part-time employed baccalaureates. They showed that debt burdens, based on discretionary income (gross income less basic living expenses), were never higher than in the first year out of school. Strictly, they were a monotonically decreasing function during the repayment years because, while repayments were in equal installments, earnings were rising. The authors concluded that, except for periods of unemployment, education debt burdens fell off rapidly after the first year or two out of college.

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[8]Richard Wabnick and William Goggin, "Indebtedness to Finance Postsecondary Education," prepared for the U.S. Department of Education, Education Policy Research Institute, 1981.

CONCLUSIONS

The primary conclusion from these analyses of debt burden is that repayment of educational debt does not appear to be too demanding for most college graduates. For example, for 1986 college graduates, the median ratio of expected debt payments to gross income (debt burden) in the first year after graduation was about 4 percent. Further, only 6.4 percent of these graduates had debt burdens in excess of 10 percent, and only 4.7 percent of these graduates with debt reported no income at the time of the survey. We conclude that the rules governing borrowing and repayment are reasonably effective in minimizing excessive debt burdens. (See Appendix C for an overview of current Federal provisions.)

We must remember, however, that the analyses were for college graduates and not for those assuming debts but not graduating from a 4-year institution. Graduates from less than 4-year schools and college dropouts may have higher median debt burdens. Also, while our analysis by gender, marital status, major field, and occupation did not identify any subgroups with excessive median debt burden, such subgroups may exist.

We therefore suggest that the U.S. Department of Education assess the debt burdens of those not graduating from 4-year schools and continue to monitor the debt burden assumed by those who do graduate, especially as statutory and regulatory provisions change, to ensure debt burdens do not become excessive.

APPENDIX A

DEBT BURDEN ASSUMPTIONS

To compute debt burden, we had to make several assumptions about loan composition, interest rates, and loan repayment periods, because the RCG surveys did not contain such information. First, we assumed that all student debt was incurred through the Guaranteed Student Loan (GSL) Program (now called Stafford Student Loans). These loans bear a specified borrower interest rate dependent upon the date of first borrowing. These rates are indicated below.

Year of first loan	GSL statutory interest rates (percent)
1965-68	6
1968-81	7
1981-83	9
1983-present	8

Based on the date they graduated, the following interest rates were assigned to each survey group:

Graduating class	Interest rate assumptions (percent)
1977	7
1980	7
1984	9
1986	8.5[9]

To the extent that these graduates borrowed from non-GSL sources bearing lower interest rates (Perkins Loans, for example), our assumptions will overestimate their repayments and debt burdens. On the other hand, if these graduates borrowed more from sources carrying higher interest rates, such as Supplemental Loans to Students (SLS), home equity, and other consumer loans, we will be underestimating their repayment responsibilities and, consequently, underestimating their debt burden.

We also made assumptions about the length of the repayment period. GSL program data in the 1970s generally indicated a 60-month (5-year) repayment schedule. Recent evidence from the Pennsylvania Higher Education Assistance Association indicates that most borrowers

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[9]The 1986 graduates were assigned 8.5 percent because the GSL rate was reduced from 9 to 8 percent while these students were in school. Some may have borrowed first in 1982; others in 1984.

(who do not defer their loans) use the maximum allowable repayment limit of 10 years. Part of the reason is that lenders likely have increased repayment periods as loan sizes have grown. The effect of this trend is to keep annual loan burdens from rising as rapidly as they otherwise might. Our assumptions are indicated below:

Graduating class	Repayment period assumptions
1977	5 years
1980	7 years
1984	10 years
1986	10 years

APPENDIX B

EDUCATION DEBT AND DEBT BURDEN FOR 1986 BACHELOR'S DEGREE RECIPIENTS

Table B-1. Debt burden of 1986 college graduates, by gender

Gender	Percent with debt	Median debt[a/]	Annual repayment[b/]	Percent with income	Median income[c/]	Median first-year debt burden[d/] (percent)
Male	51.1	$5,000	$744	92.0	$20,500	3.4
Female	48.6	4,700	699	90.3	16,600	4.4
All	50.1	4,800	722	90.6	19,000	3.9

a/ Of those with debt.

b/ Loan terms of 8.5 percent for 10 years.

c/ Of those with income and debt.

d/ The median of individual debt burdens, not the ratio of median debt to median income in the first year after graduation. Individual debt burdens are calculated as the ratio of annual repayment to gross income, where annual repayment is the total of monthly payments required to amortize the debt. Computed only for those with debt and first-year income.

Table B-2. Debt burden of 1986 college graduates, by marital status

Marital status	Percent with debt	Median debt[a/]	Annual repayment[b/]	Percent with income	Median income[c/]	Median first-year debt burden[d/] (percent)
Married	44.5	$4,000	$595[e/]	89.9	$19,200	3.1
Other	52.1	5,000	744	91.6	18,300	4.2
All	50.1	4,800	722	90.6	19,000	3.9

a/ Of those with debt.

b/ Loan terms of 8.5 percent for 10 years.

c/ Of those with income and debt.

d/ The median of individual debt burdens, not the ratio of median debt to median income in the first year after graduation. Individual debt burdens are calculated as the ratio of annual repayment to gross income. Annual repayment is the total of monthly payments required to amortize the median debt. Computed only for those with debt and first-year income.

e/ The program minimum repayment is actually $600. Thus, a lender would likely have the repayment period slightly less than the 10 years assumed in footnote b/. This would have an insignificant effect on the first-year debt burden.

Table B-3. Debt burden of 1986 college graduates, by major field

Major field	Percent with debt	Median debt[a/]	Annual repayment[b/]	Percent with income	Median income[c/]	Median first-year debt burden[d/] (percent)
Biology	54.1	$5,000	$744	91.3	$20,500	4.3
Business	45.2	4,500	670	92.2	18,100	3.7
Education	53.0	4,400	655	92.0	15,000	4.8
Humanities	52.0	4,000	595[e/]	88.1	15,300	4.3
Physical Science	54.4	5,000	744	92.2	24,300	3.3
Social Science	47.2	5,000	744	86.7	16,200	4.6
Other	52.6	4,050	603	90.5	15,600	4.2
All	50.1	4,800	722	90.6	19,000	3.9

a/ Of those with debt.

b/ Loan terms of 8.5 percent for 10 years.

c/ Of those with income and debt.

d/ The median of individual debt burdens, not the ratio of median debt to median income in the first year after graduation. Individual debt burdens are calculated as the ratio of annual repayment to gross income. Annual repayment is the total of monthly payments required to amortize the median debt. Computed only for those with debt and first-year income.

e/ The program minimum repayment is actually $600. Thus, a lender would likely have the repayment period slightly less than the 10 years assumed in footnote b/. This would have an insignificant effect on the first-year debt burden.

Table B-4. Debt burden of 1986 college graduates, by first occupation

Occupation	Percent with debt	Median debt[a/]	Annual repayment[b/]	Median income[c/]	Median first-year debt burden[d/] (percent)
Professional	50.6	$5,000	$744	$19,800	3.7
Sales/ Administration	49.0	4,200	625	16,000	4.2
Service	48.0	4,500	670	13,000	5.7

a/ Of those with debt.

b/ Loan terms of 8.5 percent for 10 years.

c/ Of those with income and debt.

d/ The median of individual debt burdens, not the ratio of median debt to median income in the first year after graduation. Individual debt burdens are calculated as the ratio of annual repayment to gross income. Annual repayment is the total of monthly payments required to amortize the median debt. Computed only for those with debt and first-year income.

Table B-5. Debt burden of 1986 college graduates, by starting salary

Salary	Percent with debt	Median debt[a/]	Annual repayment[b/]	Median income[c/]	Median first-year debt burden[d/] (percent)
Under $10,000	53.4	$4,300	$640	$7,100	9.3
$10,000 - 20,000	51.4	4,500	670	15,600	4.5
$20,000 - 30,000	50.8	5,000	744	23,000	3.1
$30,000+	38.7	5,000	744	32,000	2.3

a/ Of those with debt.

b/ Loan terms of 8.5 percent for 10 years.

c/ Of those with income and debt.

d/ The median of individual debt burdens, not the ratio of median debt to median income in the first year after graduation. Individual debt burdens are calculated as the ratio of annual repayment to gross income. Annual repayment is the total of monthly payments required to amortize the median debt. Computed only for those with debt and first-year income.

APPENDIX C

FEDERAL EDUCATION LOAN PROGRAMS AND DEBT BURDEN

In recent years, the Federal Government has addressed some of the issues related to debt levels and burdens. Through a variety of policy and programmatic changes, the government has sought to limit the repayment onus faced by recent graduates. These policy and program initiatives are discussed below.

Loan Limits

One aspect of Federal debt burden policy is to place constraints on the amounts that students can borrow under each of several loan programs. These constraints, however, are not tied to the borrower's capacity to repay, but to the borrower's overall debt level.

Annual and aggregate loan limits have been the primary mechanism through which the Federal Government has controlled the maximum debt levels. The following undergraduate loan limits currently apply in each of the four major Federal loan programs:

Program	Annual limit	Aggregate limit
Perkins Loans	Need-limited	$ 9,000
Stafford Student Loans	$2,625 (lower class) 4,000 (upper class), and need-limited	17,250
Supplemental Loans to Students	$4,000, and need-limited	20,000
PLUS (formerly, Parent Loans for Undergraduate Students)	$4,000 per child, and need-limited	20,000

However, as the analysis shows, the amount of debt is not necessarily related to the actual debt burden experienced by the borrower.

Graduated Repayment

With the 1986 Higher Education Amendments, the Federal Government instituted several new provisions aimed at students with high debt burdens. One provision clarified that lenders could offer graduated repayment schedules--where payments escalate during the repayment period. However, lenders were not required to do so. This provision acknowledged the need to shift some debt burden from the early repayment years to the later ones for some borrowers. To the extent that this provision is offered and accepted by students with high debt burdens, it can significantly reduce high debt burdens. No rules, however, currently govern the eligibility of borrowers for such a schedule or the terms that can be offered. Since mid-1988, the Student Loan Marketing Association (SLMA)[10] has offered a graduated repayment option to most of its borrowers. But, at the national level, there are no data on the overall offering of such schedules or on the characteristics of students who accept graduated repayment.

Consolidation Loans

Also in the 1986 Higher Education Amendments (HEA), Congress permitted lenders to consolidate a borrower's multiple loans, restructure debt, and offer repayment periods from 10 to 25 years if cumulative debt exceeds $5,000. In contrast to graduated repayment, the Stafford consolidation provisions (Sec. 428C of HEA) are clear and direct as to eligibility and loan terms. However, these provisions may not offer much relief for borrowers with high debt burdens. This provision restricts consolidation to borrowers with high debt levels (over $5,000) but, in so doing, ignores a borrower's capacity to repay. Since our data show that $4,800 was the median cumulative debt of 1986 graduates with debt, it is likely that many students with high debt burdens but low debt levels (for example, what we would expect of some proprietary school students) are overlooked while others with high debt but low burdens receive substantial, albeit unnecessary, financial relief.

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[10]SLMA (Sallie Mae) is the predominant secondary market for student loans, holding the paper of approximately one in three outstanding student loans.

The consolidation provisions require lenders to adhere to the following relationship between cumulative loan amount and repayment:

Loan amount	Repayment period
Under $5,000	Not eligible for consolidation
5,000 - 7,499	Up to 10 years
7,500 - 9,999	Up to 12 years
10,000 - 19,999	Up to 15 years
20,000 - 44,999	Up to 20 years
Above $45,000	Up to 25 years

In fiscal year 1987, Stafford lenders consolidated approximately $263 million of loans. The following year, consolidation volume more than doubled to approximately $642 million. The average consolidation loan was over $14,000 in both years. Although these figures represent a small percentage of outstanding Stafford loans, the dollar amount of consolidation loans is likely to grow in 1989 and 1990 because SLMA has recently begun to offer a SMART loan consolidation account to its borrowers which promises to reduce monthly payments by up to 40 percent.

Income-Contingent Loan Demonstration

In addition to the new provisions it instituted within the Guaranteed Student Loan Program, the Federal Government began a demonstration program in 1987 to evaluate the effectiveness of offering income-contingent repayment schedules to college graduates. Ten institutions currently participate in this demonstration program. Income contingency is a more structured type of graduated repayment where the amount to be repaid is a function of initial loan size and student and spouse earnings after graduation.[11]

Grace Period

Under current law, borrowers are granted a grace period after leaving school during which they are not required to make any payments on their loans. The grace period is intended to

[11]The U.S. Department of Education is currently conducting an evaluation of the demonstration.

help the borrower by delaying repayment responsibilities until the borrower has had a reasonable opportunity to obtain employment and financial strength. The length of this period is 6 or 9 months depending on when the borrower first took out his or her loans. While this period represents a considerable cost to the Federal Government, since the government continues to pay interest benefits and special allowance payments during this period, the benefit in terms of reduced defaults may outweigh these costs.

Deferments

Borrowers are also provided with additional time periods beyond the grace period during which they are not required to make principal payments on their loans. Such periods, deferments, are granted to compensate for the borrowers' lack of adequate income during times of national service, unemployment, further education, and other specific circumstances. The following deferments are available to borrowers:

- While the borrower is enrolled full-time (half-time if the borrower received a loan for such enrollment) in a graduate fellowship program or in a rehabilitation training program;
- For 3 years while the borrower is in the military, in the National Oceanic and Atmospheric Administration Corps, or an officer in the Commissioned Corps of the Public Health Service;
- For up to 3 years while the borrower is a volunteer in the Peace Corps, is a full-time volunteer in VISTA, or is a comparable full-time volunteer in a tax-exempt organization;
- For up to 3 years while the borrower is a full-time teacher in a shortage area;
- For up to 2 years while the borrower is serving an internship required to begin professional practice;
- For up to 3 years while the borrower is temporarily totally disabled or while the borrower is required to care for a disabled dependent;
- For up to 2 years while the borrower is unemployed;
- For up to 6 months for parental leave; and
- For up to 1 year for mothers of preschool children who are just entering or reentering the work force and who earn less than $1 in excess of the minimum wage.

While this list is extensive, many analysts would argue that adequate deferments are not available to cover the many valid circumstances during which a borrower might temporarily not be able to make payments on his or her loans. While lenders are authorized to grant forbearance to such borrowers, there are no legal requirements for such treatment. On the other hand, many analysts would argue that many of the existing deferments are unnecessary and represent an unnecessary Federal expense.

Counseling Requirements

Recent requirements for counseling have expanded the information schools and lenders must provide to students before disbursing funds (at entrance) and again before students leave school (at exit). These counseling sessions are useful for the institution and lender to help the borrower to understand the terms and conditions of the loan and to impress on the borrower the importance of meeting his or her repayment obligation. Information required to be provided to the borrower includes:

- The terms and conditions of the loan;
- The student's rights and responsibilities with regard to the loan, including the ramifications of default and the repayment options available; and
- The estimated monthly repayment amount.

Because recent data from the National Postsecondary Student Aid Survey have indicated that many defaulters are confused about the loan process and their repayment responsibilities, these counseling sessions have received greater emphasis in Department regulations and publications as an important debt management and default prevention technique.

Multiple Disbursement/Delayed Disbursement

Several other provisions limit the amount of funds disbursed to a borrower who drops out of school and, thus, limit the amount of debt and debt burden that such students experience. All loans must be disbursed to the borrower in at least two installments, thus limiting the debt of a

student who drops out before the second term. Institutions with default rates above 30 percent must delay the certification of first-time borrowers' loan applications so that the borrowers receive no loan proceeds until at least 30 days into the loan period; and all schools, regardless of default rate, are required to delay certification of SLS loans for first-time borrowers. As with multiple disbursements, delayed certification limits the amount of debt and debt burden experienced by borrowers who drop out of their program.